Listing of the Claims

This listing of claims will replace all prior versions, and listings of claims in the application.

1-10. (Cancelled)

11. (Currently amended) A method for the quantitation or detection of one or more target nucleic acid molecules in a sample during nucleic acid synthesis comprising:

mixing one or more a target nucleic acid molecules with one or more fluorescently labeled oligonucleotides, wherein said one or more oligonucleotides are labeled with only a single type of fluorescent, said single type of fluorescent label having the same chemical structure, and said oligonucleotide undergoes a detectable change in fluorescence upon hybridization of said one or more oligonucleotides to said one or more target nucleic acid molecules;

incubating said mixture under conditions sufficient to synthesize one or more nucleic acid molecules complementary to all or a portion of said one or more target nucleic acid molecules, said one or more synthesized nucleic acid molecules comprising said one or more oligonucleotides; and

detecting the presence or absence or quantifying the amount of said one or more synthesized nucleic acid molecules by measuring said fluorescent label; wherein said fluorescent label is selected from the group consisting of JOE, FAM, TAMRA, or ROX.

12. (Currently amended) A method for quantitation or detection of one or more target nucleic acid molecules in a sample during nucleic acid amplification comprising:

mixing one or more target nucleic acid molecules with one or more fluorescently labeled oligonucleotides under conditions sufficient to amplify one or more nucleic acid molecules complementary to all or a portion of said one or more target nucleic acid molecules, said one or more amplified nucleic acid molecules comprising said one or more oligonucleotides, wherein said one or more oligonucleotides are labeled with only a single type of fluorescent label, said single type of fluorescent label having the same chemical structure, and said oligonucleotide undergoes a detectable change in fluorescence upon hybridization of said one or more oligonucleotides to said one or more target nucleic acid molecules; and

detecting the presence or absence or quantifying the amount of said one or more target nucleic acid molecules by measuring said fluorescent label; wherein said fluorescent label is selected from the group consisting of JOE, FAM, TAMRA, or ROX.

13. (Cancelled)

14. (Previously presented) The method of claims 11 or 12, wherein said detection step comprises detecting or measuring the level of activity of the fluorescent label during said synthesis or amplification compared to the level of activity of the fluorescent label in the absence of said synthesis or amplification.

15. (Original) The method of claim 12, wherein said amplification is accomplished by at least one method selected from the group consisting of PCR, 5-RACE, RT PCR, Allele-specific PCR, Anchor PCR, "one-sided PCR," LCR, NASBA, and SDA.

16. (Cancelled)

17. (Previously presented) The method of any one of claims 11 or 12, wherein said one or more oligonucleotides comprise one or more hairpin structures.

18. (Currently amended) A method for amplifying a double stranded nucleic acid molecule, comprising:

providing a first and second primer, wherein said first primer is complementary to a sequence within or at or near the 3´-termini of the first strand of said nucleic acid molecule and said second primer is complementary to a sequence within or at or near the 3´-termini of the second strand of said nucleic acid molecule;

hybridizing said first primer to said first strand and said second primer to said second strand in the presence of one or more polymerases, under conditions such that said primers are extended to result in the synthesis of a third nucleic acid molecule complementary to all or a portion of said first strand and a fourth nucleic acid molecule complementary to all or a portion said second strand;

denaturing said first and third strands, and said second and fourth strands; and

repeating the above steps one or more times, wherein one or both of said first and second primers are labeled with only a single type of fluorescent label, said single type of fluorescent label having the same chemical structure; wherein said fluorescent label is selected from the group consisting of JOE, FAM, TAMRA, or ROX,;

and wherein said primer undergoes a detectable change in fluorescence upon hybridization of said one or more labeled primers to said nucleic acid molecule.

19. (Original) The method of claim 18, wherein at least one of said primers comprises at least one hairpin structure.

20-58. (Cancelled)

59. (Previously presented) The method of claim 18, wherein said primers further comprise one or more hairpin structures.

60-62. (Cancelled)

63. (Previously presented) The method of any one of claims 11, 12, or 18, wherein said detectable label is at the fourth base from the 3' termini.

64. (Previously presented) The method of any one of claims 11, 12, or 18, wherein said detectable label is at the fifth base from the 3' termini.

65. (Previously presented) The method of any one of claims 11, 12, or 18, wherein said detectable label is at the sixth base from the 3' termini.

66. (Previously presented) The method of any one of claims 11, 12, or 18, wherein said detectable label is attached to one of the ten 3'-most terminal nucleotides.

67. (Previously presented) The method of any one of claims 11, 12, or 18, wherein said detectable label is attached to one of the twenty 3'-most terminal nucleotides.

68-85. (Cancelled)